

Nagori Ashwagandha: A Miracle Crop for Nagaur and Arid Zone of Rajasthan

*Sourabh Sankhla

M.Sc. Scholar, GPB, CoA, Nagaur, Agriculture University, Jodhpur

*Corresponding Author's email: sourabhsankhla123@gmail.com

In recent years, changes in work style more mentally work load, decrease in sleep duration and increase in stress level due to those factors many types of disease observed. Ashwagandha have medicinal property to overcome this type of diseases. The demand of overseas and online market increase day by day because to get good amount of price. Nagori Ashwagandha is a local landrace that is only found in the Nagaur district of Rajasthan. It is a profitable venture for cultivation on arid, salty, and wasteland. Nagori ashwagandha can ensure a supply of good-quality raw material. The special feature of Nagori ashwagandha is due to its old pedigree lineage, chemical properties, thicker and more brittle roots, which are rich in starch, higher in root yield, and other beneficial compounds. Other important chemical constituents that are found in Nagori ashwagandha include Withanolides, Withaferin A, Withanolide D and sitionodosides VII and VIII, making it different from other varieties of ashwagandha. Ashwagandha is not preferred as a feed by animals. It is another important feature of this crop from a farmer's point of view.



Key words: pedigree, brittle, withanolides, withaferin A; sitionodosides; preferred; feed

Introduction

Withania somnifera Dunal is commonly known as Ashwagandha, Indian winter cherry, or Indian ginseng. The name Ashwagandha is derived from Sanskrit: 'Ashwa' meaning horse and 'Gandha' meaning odor. The horse-like odor emanating from the fresh root is a key identifying feature. Present health issues globally include infertility, anxiety, insomnia, inflammation, hypotension, Parkinson's disease, and Alzheimer's disease. The chemical constituents present in Ashwagandha account for its use in Ayurvedic medicine. Consumption of Ashwagandha root powder is believed to promote strength and vitality comparable to that of a horse. In Nagori ashwagandha, the root weight, some chemical components, and starch quantity are more than the other varieties. Finally, my aim is to especially encourage the farmers of the Nagaur district of Rajasthan and the arid region. Nagauri ashawagandha has also got the GI tag in the year 2026. From a future perspective of revenue generation and export of the extract of the roots of ashwagandha is the best opportunity for the farmers for cultivation of nagori ashwagandha.

Active component

Ashwagandha is rich in some phytochemical compositions like withaferin A, withanolides, and some alkaloids like witanin, somniferin, tropin, choline, etc.

Benefits for the human body

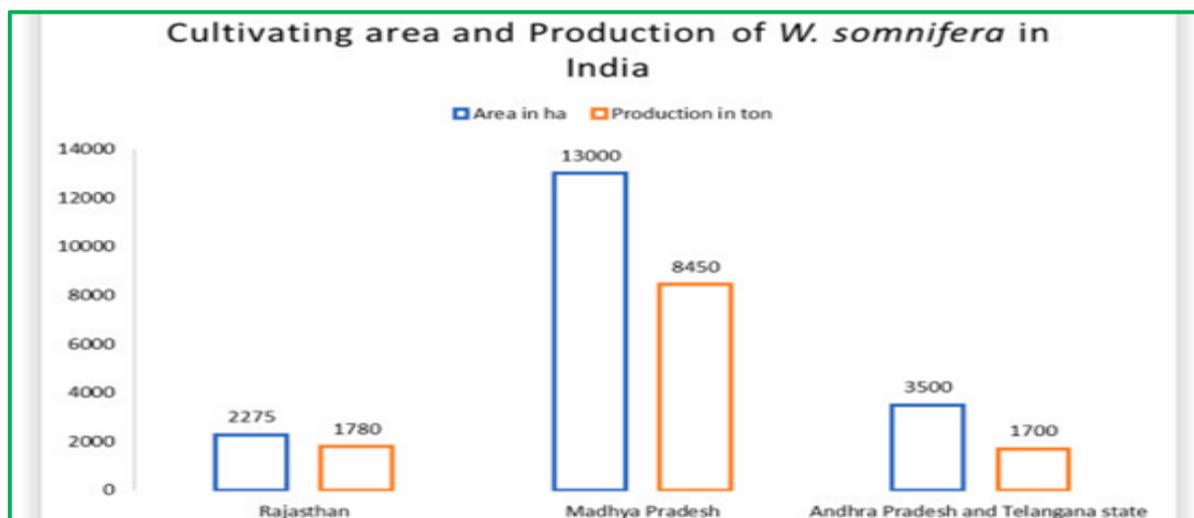
Fertility- Ashwagandha increases the volume of semen, sperm count, testosterone, and luteinizing hormone levels.

Insomnia- from some research, taking the extract of ashwagandha may improve sleep quality, sleep efficiency.

Anti-carcinogenic property- some chemical content, which is present in ashwagandha, is withaferin A is responsible for anti-cancer.

The extract of ashwagandha root is also helpful in controlling inflammation, low blood pressure.

Area of the crop



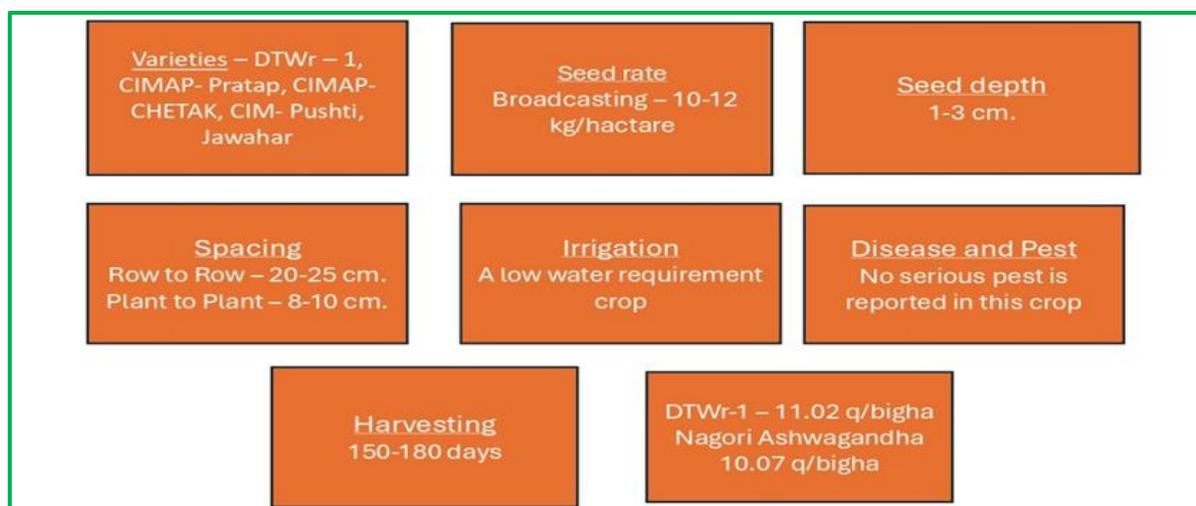
Important aspects related to Nagori Ashwagandha

Nagori ashwagandha is naturally grown in the region of Nagaur and found in the boundary-sharing districts of Jodhpur, Bikaner, Churu, and Sikar. It is a local landrace that makes it different from other varieties. It is a dense, hairy, erect herb that grows up to 1.5 mt.

Requirements of the Climate for the crop

It is grown as a late rainy season kharif crop. Nagori ashwagandha is a medicinal herb that is easily cultivated in low rainfall areas that receive 500-750 mm of rainfall. It is a suitable crop for an arid region because the soil quality is very poor and the maximum area is covered by unfertile land. It can be cultivated on wasteland and high-salinity soil. Soil pH requirement is 7.5-8.0 with proper drainage. For Crop cultivation, temp requirement is 20-35°C. In field preparation activity 2-3, ploughing and discing should be done before the rains.

Agronomical practices for the crop



Thinning and weeding

After sowing from the broadcasting method or in line in furrows should be thinned out by hand 25-30 days after sowing the seed, maintaining the plant population of about 30-60 plants/sq.m.

Manures and fertilizers

FYM	Vermicompost	Nitrogen	Phosphorous
10 tones	1 tone	15 kg	15 kg

*For one hectare of land

Maturity indices

- Primary indices are leaves are dry and berries turn yellow or red in color.
- The root gets thicker and has more alkaloid content.

Price and Products

Powder price approx. 1740 rupees per kg.

Raw material price is 150-400 rupees per kg.



Summary

Nagori ashwagandha is a local landrace originating in Nagaur. Due to the dry and hot climate in Nagaur, the tolerance capacity of Nagori ashwagandha is more than other varieties. Important chemicals and alkaloids, which are mostly used in drugs or the medicine industry present in amounts. It can be cultivated on barren and salty land easily. Ashwagandha has not been preferred as a feed by animals. From the farmers' point of view, farmers can be grown in integration with other crops. For good profit, farmers sold at the overseas and national markets to get a handsome amount. So, the Nagori Ashawagandha is a profitable and alternative source of revenue generation.

References

1. Ford ES, Cunningham TJ, Croft JB. Trends in Self-reported sleep duration among US adults from 1985 to 2012. *Sleep*. 2015; 38:829–32.
2. Singh N, Bhalla M, Jager P, Gilca M (2011) An Overview on Ashwagandha: A Rasayana Rejuvenator of Ayurveda. *Afr J Tradit Complement Altern Med* 8(5): 208-213.
3. Shepherd A, Brunckhorst O, Ahmed K, Xu Q. Botanicals in health and disease of the testis and male fertility: a scoping review. *Phytomedicine*. 2022;106:154398.
4. Manures and fertilizers from TNAU
5. Verma PPS, Singh A (2014) Scientific Cultivation of Ashwagandha (*Withania somnifera*). Conference JIGYASA-2014 India.